### **Catalytic Process Intensification of Bio-Renewable Surfactants Platform**

EST.1943

#### Goal:

SIRONIX

RENEWABLES

 Develop catalytic chemistries and scaleup approaches for commercialization of new bio-renewable oleo-furan surfactant (OFS) technology

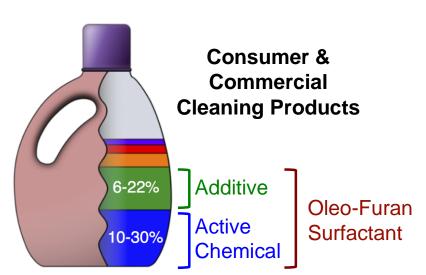
#### Approach:

 Accelerated screening for catalytic improvements to core chemistries and collaborative testing for development of new surfactant structures.

## Impact on the Bioenergy Industry:

 Improve economics and accelerate commercialization of OFS for ecofriendly and more effective detergents





# ChemCatBio Capabilities Leveraged:

- Catalyst development and screening
- Computational modeling
- Reaction engineering & process intensification



